Week 6 Lecture 3

October 6, 2017

- **Stretch 32 (Pg. 101):**

  - **Solution:** Count the squares in the ceiling tiles and multiply length by width. Multiply this by the height after translating all three to feet.

- **Stretch 33 (Pg. 101):**

  - **Solution:** (a) A round manhole cover cannot fall through its circular opening, whereas a square manhole cover could fall in if it were inserted diagonally in the hole. (b) A round manhole cover is easily moved and rolled. (c) Circular covers don't need to be rotated or precisely aligned when placing them on the opening. (d) The circular shape also maximizes the area for a given amount of material (perimeter). (e) Human beings have a roughly circular cross-section.

- **Ch. 6 Stir It Up - Section: Trial and Error**

  - **More Cryptarithmetic (Pg. 116)**